

Author Search

=> FILE HCAPLUS

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FILE COVERS 1907 - 16 Sep 2009 VOL 151 ISS 12

FILE LAST UPDATED: 15 Sep 2009 (20090915/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

HCAPLUS now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

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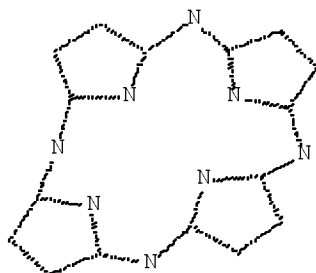
This file contains CAS Registry Numbers for easy and accurate substance identification.

The ALL, BIB, MAX, and STD display formats in the CA/CAPLUS family of databases have been updated to include new citing references information. This enhancement may impact record import into database management software. For additional information, refer to NEWS 9.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> D STAT QUE L24

L1 STR

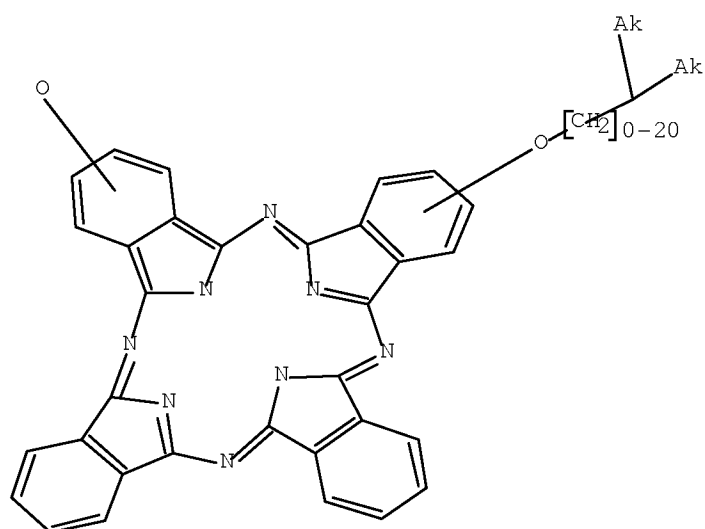


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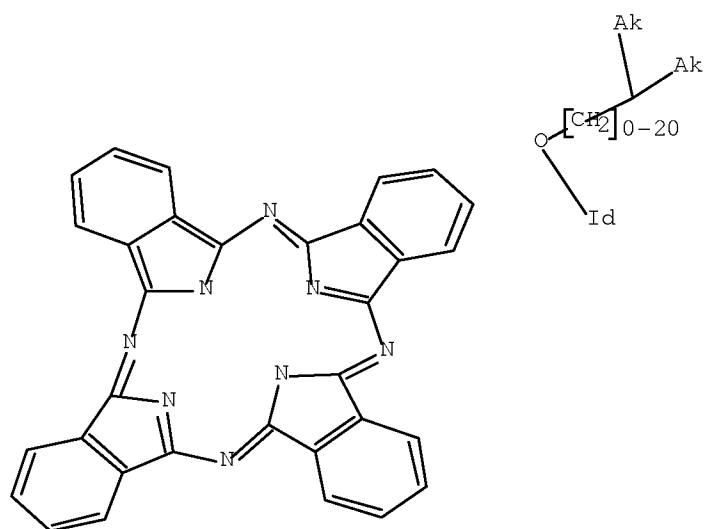
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L14 STR



Structure attributes must be viewed using STN Express query preparation.

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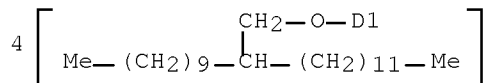
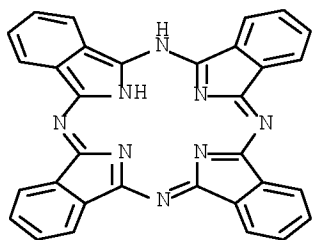
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L24 12 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON (L20 OR L21 OR L22 OR L23) AND (L18 OR L19)

=> D IBIB ED ABS HITSTR L24 1-12

L24 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2009:883577 HCAPLUS Full-text
 DOCUMENT NUMBER: 151:276671
 TITLE: Homeotropic Alignment of a Discotic Liquid Crystal Induced by a Sacrificial Layer
 AUTHOR(S): Pouzet, Eric; De Cupere, Vinciane; Heintz, Christophe; Andreasen, Jens W.; Breiby, Dag W.; Nielsen, Martin M.; Viville, Pascal; Lazzaroni, Roberto; Gbabode, Gabin; Geerts, Yves H.
 CORPORATE SOURCE: Laboratoire de chimie des polymeres, Universite Libre de Bruxelles, Brussels, B-1050, Belg.
 SOURCE: Journal of Physical Chemistry C (2009), 113(32), 14398-14406
 CODEN: JPCCCK; ISSN: 1932-7447
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 23 Jul 2009
 AB A convenient method to induce face-on orientation of an alkoxyphthalocyanine discotic mesogen is described. The alignment is imposed by the confinement of the discotic thin films with a top sacrificial polymer layer that is easily removed by washing with a selective solvent, after thermal annealing. Thin films were characterized by optical and atomic force microscopy, UV-visible absorption spectroscopy, and grazing incidence wide angle x-ray scattering. The data converge in showing the central role of the sacrificial layer in promoting alignment with the planar mols. orienting parallel to the substrate in an essentially homeotropic arrangement over large lateral length scales and the persistence of this desirable alignment after removal of the layer.
 IT 803724-14-3
 RL: PRP (Properties)
 (homeotropic alignment of alkoxyphthalocyanine derivative discotic liquid crystal induced by poly(vinylphenol) sacrificial layer)
 RN 803724-14-3 HCAPLUS
 CN 29H,31H-Phthalocyanine, C,C,C,2-tetrakis[(2-decyltetradecyl)oxy]- (CA INDEX NAME)



REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:351507 HCAPLUS Full-text

DOCUMENT NUMBER: 150:435417

TITLE: Miscibility between Differently Shaped Mesogens:
Structural and Morphological Study of a
Phthalocyanine-Perylene Binary System

AUTHOR(S): Zucchi, Gael; Viville, Pascal; Donnio, Bertrand; Vlad,
Alexandru; Melinte, Sorin; Mondeshki, Mihail; Graf,
Robert; Spiess, Hans Wolfgang; Geerts, Yves H.
; Lazzaroni, Roberto

CORPORATE SOURCE: Laboratoire de Chimie des Polymeres, Universite Libre
de Bruxelles, Brussels, B-1050, Belg.

SOURCE: Journal of Physical Chemistry B (2009), 113(16),
5448-5457

CODEN: JPCBFK; ISSN: 1520-6106

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 24 Mar 2009

AB The thermotropic, structural, and morphol. properties of blends of a disk-like liquid crystalline phthalocyanine derivative and a lath-shaped perylenetetracarboxydiimide mesogen derivative were studied by combining DSC, thermal polarized optical microscopy, x-ray diffraction, solid-state NMR, and atomic force microscopy. The two compds. are fully miscible for blends containing at least 60 mol % of the disk-like mol. In such composition range, the homogeneous blends form a columnar hexagonal (Colh) mesophase for which the thermal stability is enhanced compared to that of the corresponding mesophase of the pure phthalocyanine. The miscible blends self-align homeotropically between two glass slides. For blends containing between 55 and 40 mol % of the disk-shaped mol., the two components are fully miscible at high temperature but the perylene derivative forms a sep. crystalline phase when the temperature is decreased. Phase separation is systematically observed in blends containing <40 mol % of the discotic mol. In this case, the resulting Colh mesophase is less stabilized compared to the blends containing a larger amount of the phthalocyanine derivative. These phase-separated blends do not show any homeotropic alignment. AFM studies confirm the formation of a single columnar morphol. in the phthalocyanine-rich blends, consistent with the full miscibility between the two compds. Solid-state NMR measurements on the mixed phase show the influence of the presence of the perylene mols. on the mol. dynamics of the mols.; remarkably, the presence of the host mols. improves the local order parameter in the phthalocyanine columnar phase.

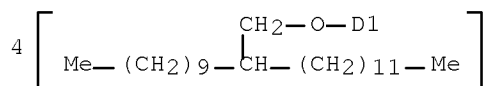
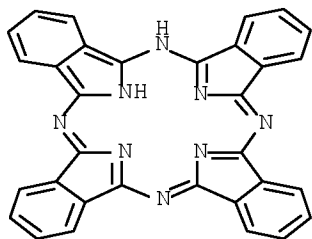
IT 803724-14-3 1142843-82-0 1142843-86-4
1142843-87-5

RL: PEP (Physical, engineering or chemical process); PRP (Properties);
PROC (Process)

(structural and morphol. study of miscibility, thermal stability and
liquid crystal properties of differently shaped phthalocyanine-erylene
binary system)

RN 803724-14-3 HCAPLUS

CN 29H,31H-Phthalocyanine, C,C,C,2-tetrakis[(2-decyltetradecyl)oxy]- (CA
INDEX NAME)



RN 1142843-82-0 HCAPLUS

CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,
2,9-di-(9Z)-9-octadecen-1-yl-, compd. with
C,C,C,2-tetrakis[(2-decyltetradecyl)oxy]-29H,31H-phthalocyanine (1:3) (CA
INDEX NAME)

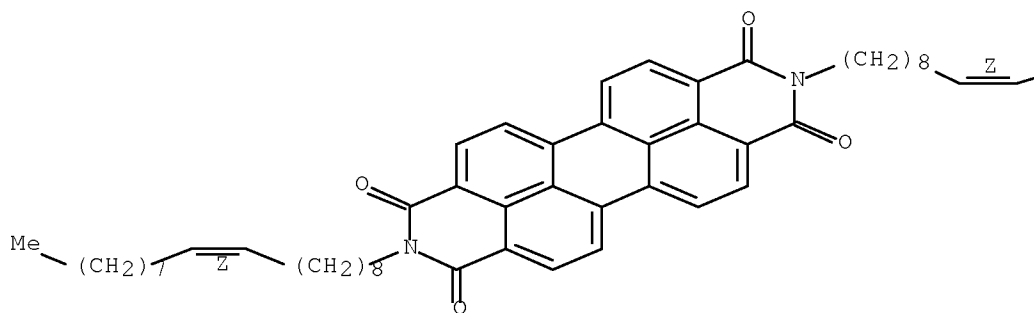
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CRN 1017242-09-9

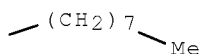
CMF C60 H78 N2 O4

Double bond geometry as shown.

PAGE 1-A



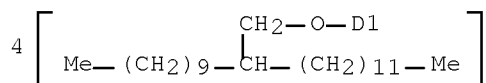
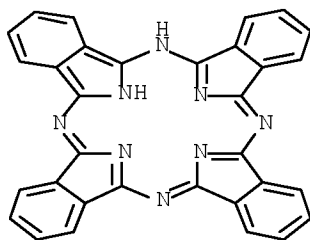
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CM 2

CRN 803724-14-3

CMF C128 H210 N8 O4
CCI IDS



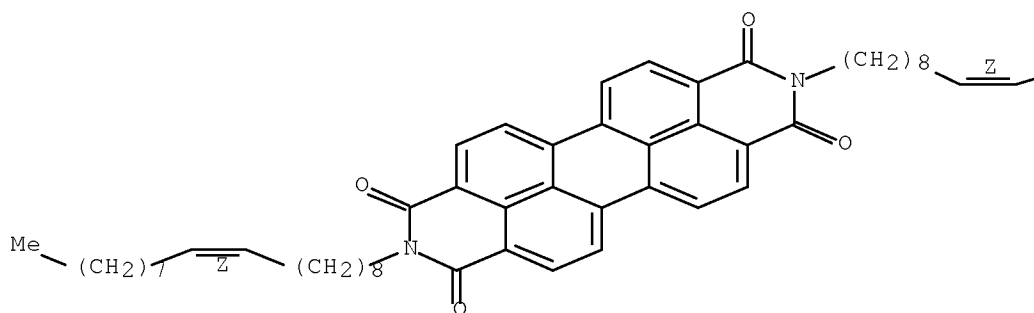
RN 1142843-86-4 HCAPLUS
CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,
2,9-di-(9Z)-9-octadecen-1-yl-, compd. with
C,C,C,2-tetrakis[(2-decyltetradecyl)oxy]-29H,31H-phthalocyanine (1:1) (CA
INDEX NAME)

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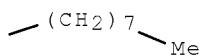
CRN 1017242-09-9
CMF C60 H78 N2 O4

Double bond geometry as shown.

PAGE 1-A



PAGE 1-B

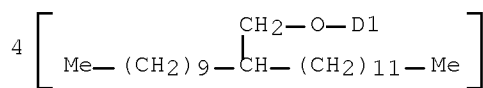
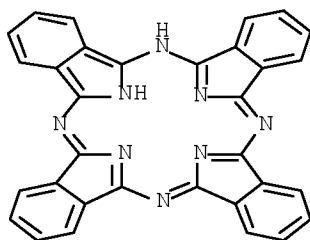


CM 2

CRN 803724-14-3

CMF C128 H210 N8 O4

CCI IDS



RN 1142843-87-5 HCAPLUS

CN Anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone,
2,9-di-(9Z)-9-octadecen-1-yl-, compd. with
C,C,C,2-tetrakis[(2-decyltetradecyl)oxy]-29H,31H-phthalocyanine (3:1) (CA
INDEX NAME)

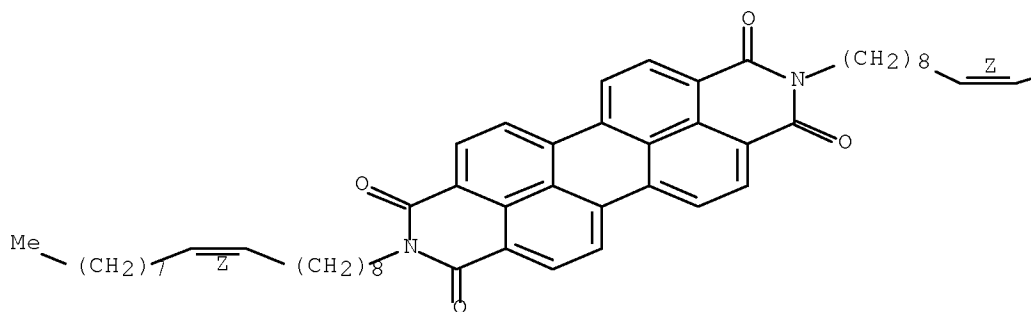
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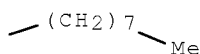
CRN 1017242-09-9

CMF C60 H78 N2 O4

Double bond geometry as shown.

PAGE 1-A



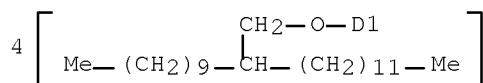
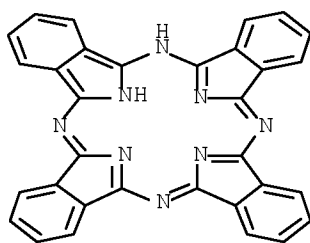


CM 2

CRN 803724-14-3

CMF C128 H210 N8 O4

CCI IDS



REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1117198 HCAPLUS Full-text

DOCUMENT NUMBER: 149:365323

TITLE: Femtosecond Charge Transfer in Assemblies of Discotic Liquid Crystals

AUTHOR(S): de Jong, Michel P.; Osikowicz, Wojciech; Sorensen, Stacey L.; Sergeyev, Sergey; Geerts, Yves H.; Salaneck, William R.

CORPORATE SOURCE: Department of Physics, Chemistry and Biology, IFM, Linköping University, Linköping, 58183, Swed.

SOURCE: Journal of Physical Chemistry C (2008), 112(40), 15784-15790

CODEN: JPCCCK; ISSN: 1932-7447

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 18 Sep 2008

AB The electronic coupling strength within columns of discotic liquid crystals was studied using core-level resonant photoemission spectroscopy. Coexisting well-ordered and disordered regions are identified in thin films of tetra-alkoxy-substituted phthalocyanines with the aid of near edge x-ray absorption fine structure and photoelectron spectroscopies. These different regions were used to derive a lower limit for the intermol. charge transfer bandwidth

within the framework of the core-hole clock principle. Average charge transfer times on the order of a few femtoseconds, i.e., significantly faster than the C(1s) core-hole lifetime, which indicates a surprisingly strong electronic coupling between the phthalocyanine units as compared to what is expected from the charge transport characteristics of this material were found.

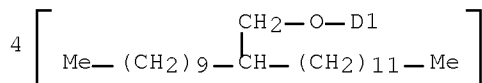
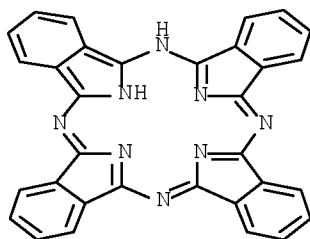
IT 803724-14-3

RL: PRP (Properties)

(femtosecond charge transfer in assemblies of discotic liquid crystals)

RN 803724-14-3 HCAPLUS

CN 29H,31H-Phthalocyanine, C,C,C,2-tetrakis[(2-decyltetradecyl)oxy]- (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1015941 HCAPLUS Full-text

DOCUMENT NUMBER: 149:367625

TITLE: Monolayer Control of Discotic Liquid Crystal by Electromigration of Dewetted Layers in Thin Film Devices

AUTHOR(S): Calo, Annalisa; Stoliar, Pablo; Cavallini, Massimiliano; Sergeyev, Sergey; Geerts, Yves W.; Biscarini, Fabio

CORPORATE SOURCE: Institute for the Study of Nanostructured Materials, CNR, Bologna, 40129, Italy

SOURCE: Journal of the American Chemical Society (2008), 130(36), 11953-11958
CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 22 Aug 2008

AB Ultrathin films of a semiconductive discotic liquid crystal, viz. phthalocyanines, can be organized to form a conductive channel tens of microns long between Au electrodes with thickness control over a single monolayer. The authors' approach exploits the electromigration of the isotropic phase formed starting from the pretransitional region of the columnar-isotropic phase transition. Dewetted isotropic material accumulates to the neg. electrode by applying a longitudinal elec. field of .apprx.1 V/μm. Dewetting

and electromigration expose an ultrathin film, a few monolayers thick, exhibiting columnar liquid crystal order. The layers of this ultrathin film melt progressively above TC and can be individually exfoliated by electromigration, starting from the ninth down to the 1st monolayer. The anal. of the current flowing through the junction as a function of the temperature, together with the comparative imaging of the evolution of morphol., yields a detailed picture of the changes in the dimensionality of the conductive phthalocyanine film and allows the authors to extract the behavior of the order parameter. The phenomenon of electromigration opens interesting questions on the technol. control of individual monolayers on device patterns.

IT 870088-23-6 870088-24-7 870088-25-8

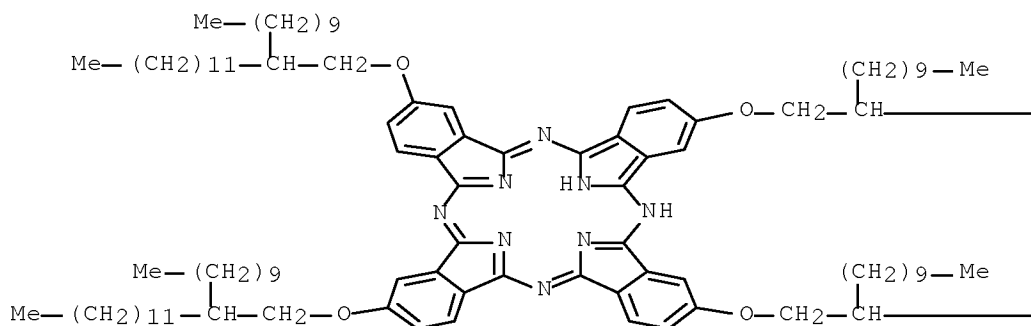
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(monolayer control of discotic liquid crystal by electromigration of dewetted layers in thin film devices)

RN 870088-23-6 HCAPLUS

CN 29H,31H-Phthalocyanine, 2,9,16,24-tetrakis[(2-decyltetradecyl)oxy]- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

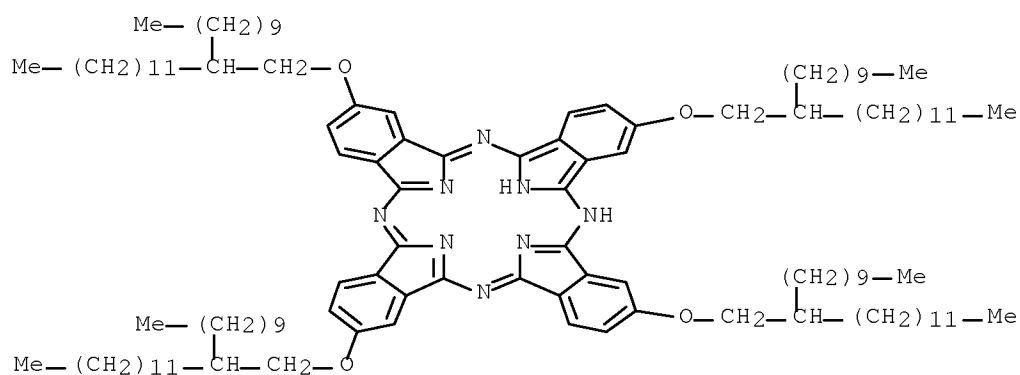
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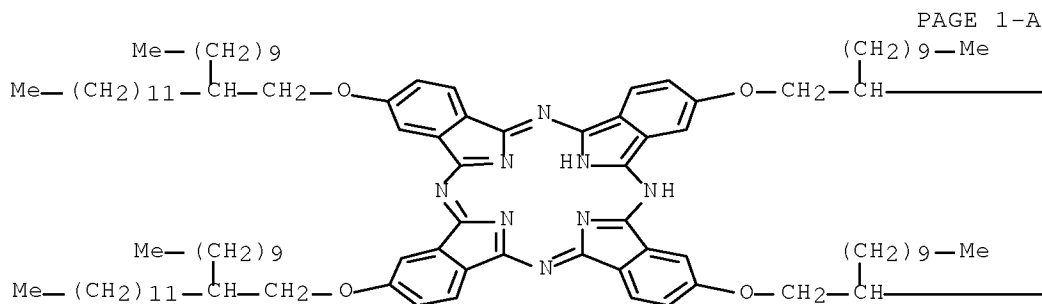
RN 870088-24-7 HCAPLUS

CN 29H,31H-Phthalocyanine, 2,9,17,24-tetrakis[(2-decyltetradecyl)oxy]- (CA

INDEX NAME)



RN 870088-25-8 HCAPLUS

CN 29H,31H-Phthalocyanine, 2,10,16,24-tetrakis[(2-decyltetradecyl)oxy]- (CA
INDEX NAME)

PAGE 1-A

PAGE 1-B

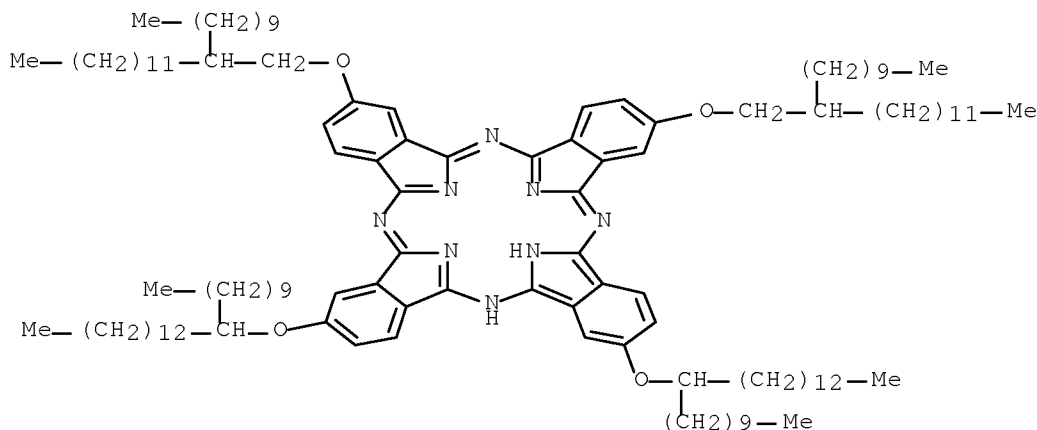
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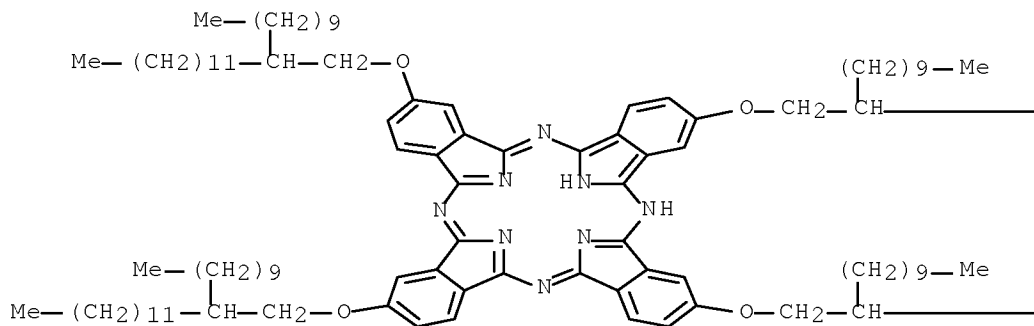
L24 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:741181 HCAPLUS Full-text
 DOCUMENT NUMBER: 149:359203
 TITLE: Microscopic morphology of thin films of
 phthalocyanine/perylene blends for organic solar cell
 devices
 AUTHOR(S): Vlad, Alexandru; Serban, Dana A.; Viville, Pascal;
 de Cupere, Vinciane; Zucchi, Gael; Melinte,
 Sorin; Bayot, Vincent; Lazzaroni, Roberto;
 Geerts, Yves
 CORPORATE SOURCE: DICE, Universite catholique de Louvain, Louvain-la
 Neuve, Belg.
 SOURCE: Materials Research Society Symposium Proceedings
 (2005), 871E(Organic Thin-Film Electronics), No pp.
 given, Paper #: I9.43
 CODEN: MRSPDH; ISSN: 0272-9172
 URL: http://www.mrs.org/s_mrs/bin.asp?CID=2734&DID=149234&DOC=FILE.PDF
 PUBLISHER: Materials Research Society
 DOCUMENT TYPE: Journal; (online computer file)
 LANGUAGE: English
 ED Entered STN: 20 Jun 2008
 AB We report on the microstructure of
 2(3)-9(10)-16(17)-23(24)-tetra(2-decyltetradecyloxy)-|
 phthalocyanine/peryleneoleylamine (PcH2/PTCDI) blends. Thin films, to be used
 as active layers in organic photovoltaic cells, were prepared by spin coating
 and spin casting of dilute toluene solns. on indium tin oxide (ITO)
 substrates. The morphol. of the thin films has been studied using Tapping
 Mode (TM) atomic force microscopy (AFM), whereas SEM was used to reveal the
 various top electrode morphologies, inherent to the different film processing
 conditions.
 IT 1056028-09-1
 RL: TEM (Technical or engineered material use); USES (Uses)
 (microscopic morphol. of thin films of phthalocyanine/perylene blends
 for organic solar cell devices)
 RN 1056028-09-1 HCAPLUS
 CN 29H,31H-Phthalocyanine, 2,9-bis[(1-decyltetradecyl)oxy]-16,23-bis[(2-
 decyltetradecyl)oxy]- (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS

L24 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:866756 HCAPLUS Full-text
 DOCUMENT NUMBER: 147:437332
 TITLE: Uniaxial Alignment of Nanoconfined Columnar Mesophases
 AUTHOR(S): Mouthuy, Pierre-Olivier; Melinte, Sorin; Geerts, Yves K.; Jonas, Alain M.
 CORPORATE SOURCE: Cermin, Universite Catholique de Louvain, Louvain-la-Neuve, 1348, Belg.
 SOURCE: Nano Letters (2007), 7(9), 2627-2632
 CODEN: NALEFD; ISSN: 1530-6984
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 ED Entered STN: 09 Aug 2007
 AB By confining discotic phthalocyanines in a network of crisscrossed nanogrooves, the authors obtain a uniaxial alignment of the columnar mesophase. The alignment process is based on the anisotropy of interface tension between the mesophase and the nanogrooves' walls. Preferential mesophase alignment results from this nonhomogeneity combined with the anisotropy of the network cell dimensions. A simple model is proposed to explain the exptl. observations.
 IT 870088-23-6 870088-24-7 870088-25-8
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
 (uniaxial alignment of tetrakis[(decyltetradecyl)oxy]phthalocyanine nanoconfined columnar mesophases on PMMA masks on silicon oxidized wafers using anisotropy of interface tension between mesophases and nanogrooves' walls)
 RN 870088-23-6 HCAPLUS
 CN 29H,31H-Phthalocyanine, 2,9,16,24-tetrakis[(2-decyltetradecyl)oxy]- (CA INDEX NAME)

PAGE 1-A

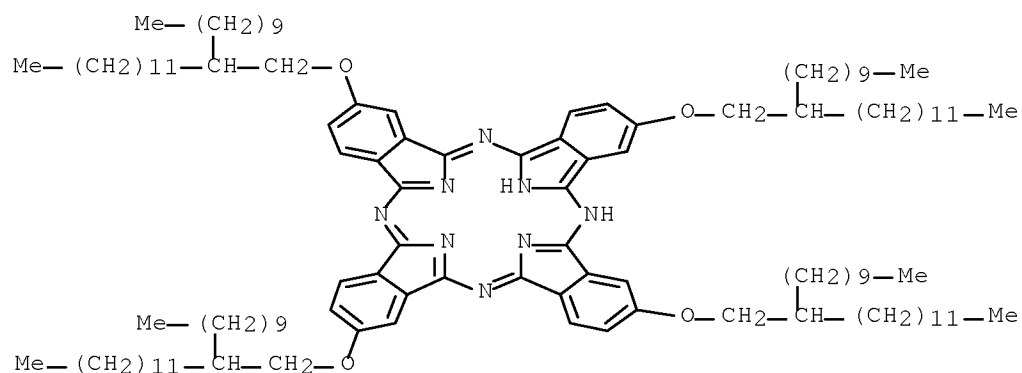


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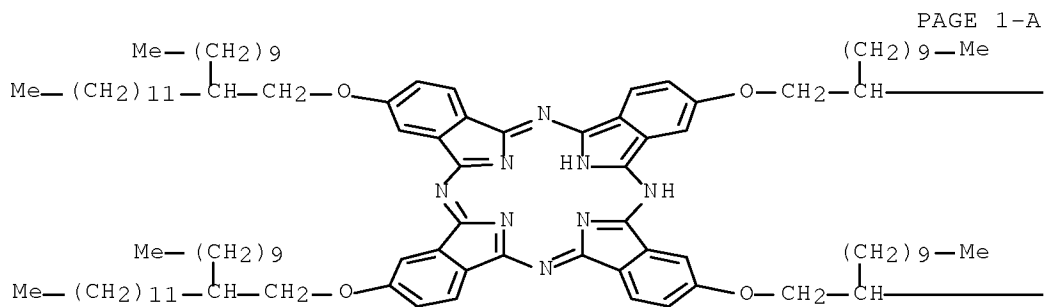
RN 870088-24-7 HCAPLUS

CN 29H,31H-Phthalocyanine, 2,9,17,24-tetrakis[(2-decyltetradecyl)oxy]— (CA INDEX NAME)



RN 870088-25-8 HCAPLUS

CN 29H,31H-Phthalocyanine, 2,10,16,24-tetrakis[(2-decyltetradecyl)oxy]— (CA INDEX NAME)



PAGE 1-A

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OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:1219525 HCAPLUS Full-text

DOCUMENT NUMBER: 147:129820

TITLE: Charge transport properties of a metal-free
phthalocyanine discotic liquid crystal

AUTHOR(S): Deibel, C.; Janssen, D.; Heremans, P.; De Cupere,
V.; Geerts, Y.; Benkhedir, M. L.;
Adriaenssens, G. J.

CORPORATE SOURCE: IMEC, Louvain, 3001, Belg.

SOURCE: Organic Electronics (2006), 7(6), 495-499

CODEN: OERLAU; ISSN: 1566-1199

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 21 Nov 2006

AB Discotic liquid crystals can self-align to form one-dimensional semiconducting
wires, many tens of microns long. In this letter, we describe the preparation
of semiconducting films where the stacking direction of the disk-like mols. is
perpendicular to the substrate surface. We present measurements of the charge
carrier mobility, applying temperature-dependent time-of-flight transient
photocond., space-charge limited current measurements, and field-effect
mobility measurements. We provide exptl. verification of the highly
anisotropic nature of semiconducting films of discotic liquid crystals, with
charge carrier mobilities of up to 2.8×10^{-3} cm²/V s. These properties make
discotics an interesting choice for applications such as organic
photovoltaics.

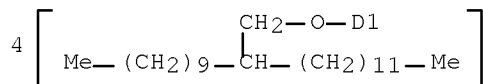
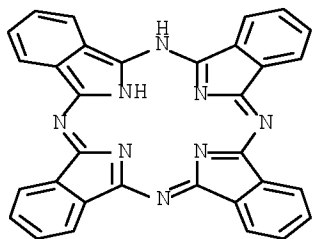
IT 803724-14-3

RL: PRP (Properties); TEM (Technical or engineered material use); USES
(Uses)

(charge transport properties of metal-free phthalocyanine discotic liquid
crystal)

RN 803724-14-3 HCAPLUS

CN 29H,31H-Phthalocyanine, C,C,C,2-tetrakis[(2-decyltetradecyl)oxy]- (CA
INDEX NAME)



OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
 REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2006:1205658 HCAPLUS Full-text
 DOCUMENT NUMBER: 145:513960
 TITLE: Method for the manufacturing of homeotropically aligned layer of discotic liquid crystals
 INVENTOR(S): De Cupere, Vinciane; Heintz, Christophe; Geerts, Yves; Tant, Julien
 PATENT ASSIGNEE(S): Universite Libre de Bruxelles, Belg.
 SOURCE: Eur. Pat. Appl., 14pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1722424	A1	20061115	EP 2005-447108	20050513
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				
PRIORITY APPLN. INFO.:			EP 2005-447108	20050513

ED Entered STN: 16 Nov 2006

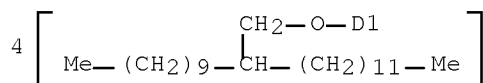
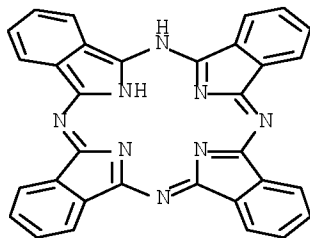
AB The present invention relates to a method for the manufacturing of an homeotropically aligned layer of discotic liquid crystals comprising the steps of: - depositing a layer of a discotic material on a substrate; - depositing a sacrificial layer on said discotic layer; - inducing the homeotropic alignment of the discotic material of the layer by a magnetic field or by thermal annealing; - removing the sacrificial layer. This allows the liquid crystals to avoid air contact during annealing and allows subsequent deposition of other active organic layers or contacts.

IT 803724-14-3

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); USES (Uses)
 (method for manufacturing homeotropically aligned layer of discotic liquid crystals)

RN 803724-14-3 HCAPLUS

CN 29H,31H-Phthalocyanine, C,C,C,2-tetrakis[(2-decyltetradecyl)oxy]- (CA
INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:478715 HCAPLUS Full-text

DOCUMENT NUMBER: 145:177655

TITLE: Effect of Interfaces on the Alignment of a Discotic
Liquid-Crystalline Phthalocyanine

AUTHOR(S): De Cupere, Vinciane; Tant, Julien;
Viville, Pascal; Lazzaroni, Roberto; Osikowicz,
Wojciech; Salaneck, William R.; Geerts, Yves
Henri

CORPORATE SOURCE: Laboratory of Polymer Chemistry, Universite Libre de
Bruxelles, Brussels, 1050, Belg.

SOURCE: Langmuir (2006), 22(18), 7798-7806
CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 23 May 2006

AB This paper deals with the influence of the nature and number of solid
interfaces on the alignment of the columns in a semiconducting discotic liquid
crystal. The solid substrates were characterized in terms of their roughness
and surface energy. The alignment of the discotic liquid crystal columns on
these substrates was determined by optical microscopy under crossed polarizers
and by tapping-mode atomic force microscopy. The nature of the substrates has
negligible influence on the alignment. The key parameter is the confinement
imposed to the film. These surprising observations are explained by the
antagonist alignment role of gas and solid interfaces.

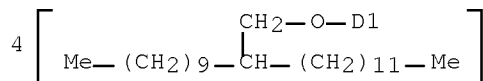
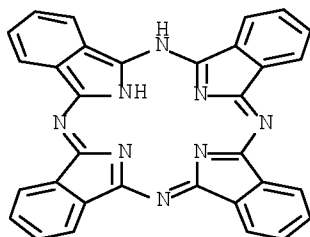
IT 803724-14-3

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP
(Physical process); PROC (Process)
(effect of interfaces on alignment of semiconducting discotic
liquid-crystalline phthalocyanine)

RN 803724-14-3 HCAPLUS

CN 29H,31H-Phthalocyanine, C,C,C,2-tetrakis[(2-decyltetradecyl)oxy]- (CA

INDEX NAME)



OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)
 REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:80962 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 144:321878

TITLE: Liquid crystalline metal-free phthalocyanines designed for charge and exciton transport. [Erratum to document cited in CA144:014471]

AUTHOR(S): Tant, Julien; Geerts, Yves Henri; Lehmann, Matthias; De Cupere, Vinciane; Zucchi, Gaeel; Laursen, Bo Wegge; Bjornholm, Thomas; Lemaure, Vincent; Marcq, Valerie; Burquel, Anick; Hennebicq, Emmanuelle; Gardebien, Fabrice; Viville, Pascal; Beljonne, David; Lazzaroni, Roberto; Cornil, Jerome

CORPORATE SOURCE: Laboratoire de Chimie des Polymeres, Universite Libre de Bruxelles, Brussels, B-1050, Belg.

SOURCE: Journal of Physical Chemistry B (2006), 110(7), 449
 CODEN: JPCBFK; ISSN: 1520-6106

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 29 Jan 2006

AB On page 20319, Table 1 lists incorrect cell parameters; the correct values are given. On page 20319, right column, lines 24 and 25, the halo values were corrected from "4.6 and 5.1 Å" to "4.9 and 5.1 Å". On page 20319, right column, lines 34 through 37, the π - π stacking distance is corrected from "3.5 Å" to "3.4-3.5 Å". On page 220319, right column, lines 51 and 52, the disk diams. are corrected from "1a (30.4 Å) and for 1b (31.8 Å)" to "1a (30.0 Å) and for 1b (32.2 Å)". On page 20320, right column, lines 8 and 9, the exptl. values are corrected from "30.8 and 32.1 Å" to "30.7 and 32.5 Å". On page 20323, Reference 45 is corrected from "Ivanov, D. A. Personal communication" to by "Gearba, R. I.; Bondar, A. I.; Goderis, B.; Bras, W.; Ivanov, D. A. Chem Mater. 2005, 17, 2825-2832.". The online supporting information is also corrected

IT 870088-18-9P 870088-19-0P 870088-20-3P

Serial No.:10/588,865

870088-21-4P 870088-22-5P 870088-23-6P

870088-24-7P 870088-25-8P

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

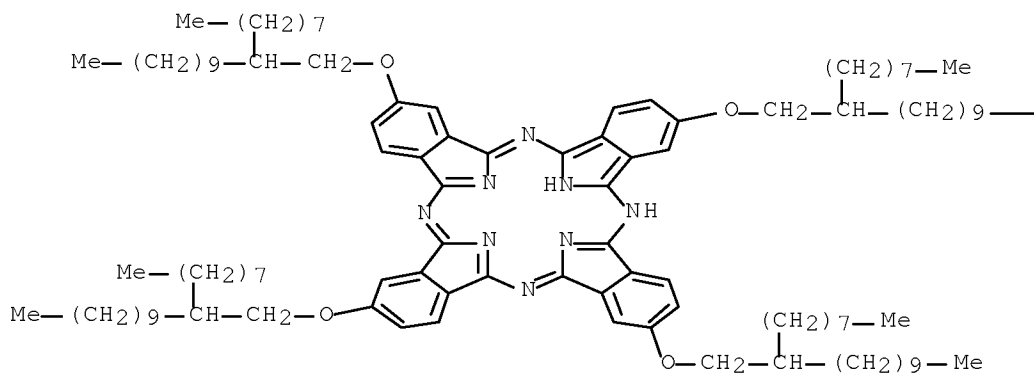
(preparation, liquid crystal properties and photophysics and mol. dynamics of

isomeric mixture containing (Erratum))

RN 870088-18-9 HCAPLUS

CN 29H,31H-Phthalocyanine, 2,9,16,23-tetrakis[(2-octyldodecyl)oxy]- (CA INDEX NAME)

PAGE 1-A

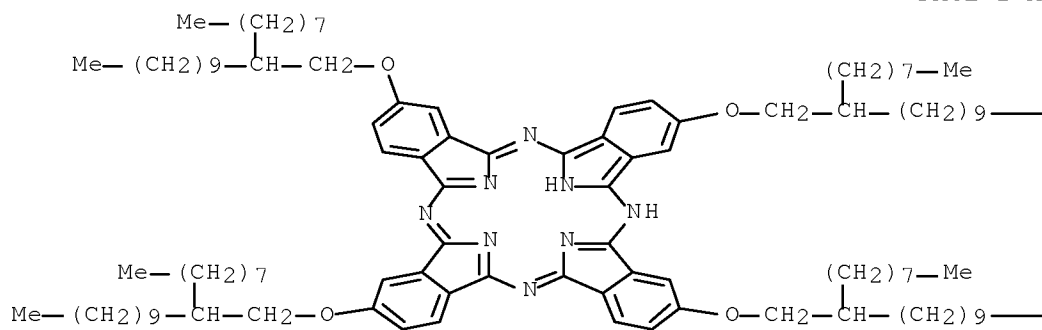


PAGE 1-B

—Me

RN 870088-19-0 HCAPLUS

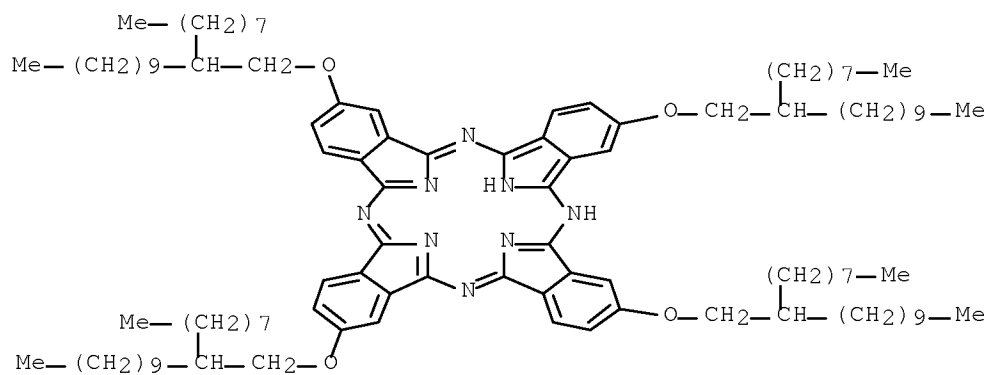
CN 29H,31H-Phthalocyanine, 2,9,16,24-tetrakis[(2-octyldodecyl)oxy]- (CA INDEX NAME)



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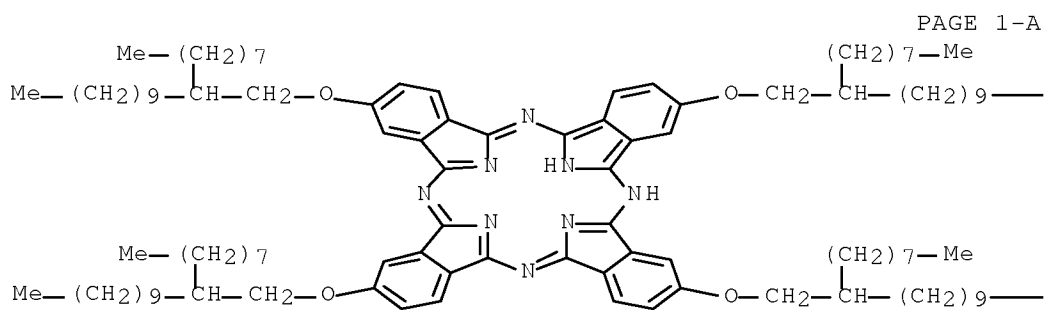
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RN 870088-20-3 HCAPLUS

CN 29H,31H-Phthalocyanine, 2,9,17,24-tetrakis[(2-octyldodecyl)oxy]- (CA
INDEX NAME)

RN 870088-21-4 HCAPLUS

CN 29H,31H-Phthalocyanine, 2,10,16,24-tetrakis[(2-octyldodecyl)oxy]- (CA
INDEX NAME)

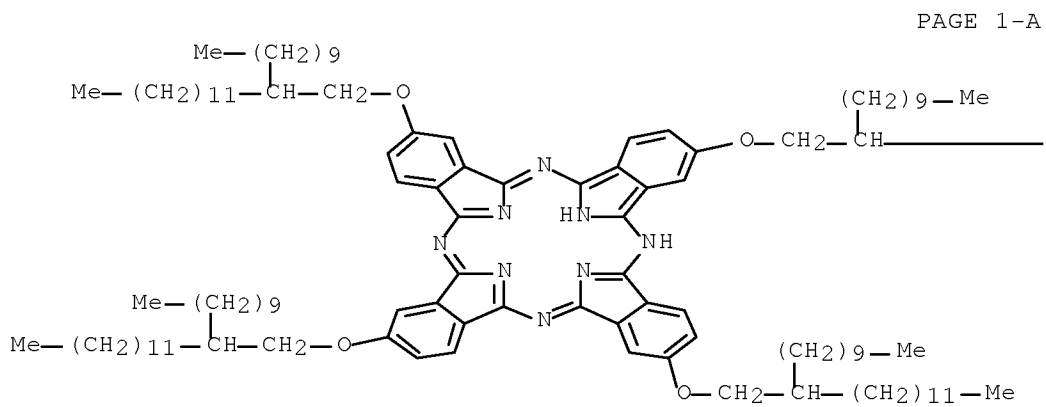


PAGE 1-B

— Me

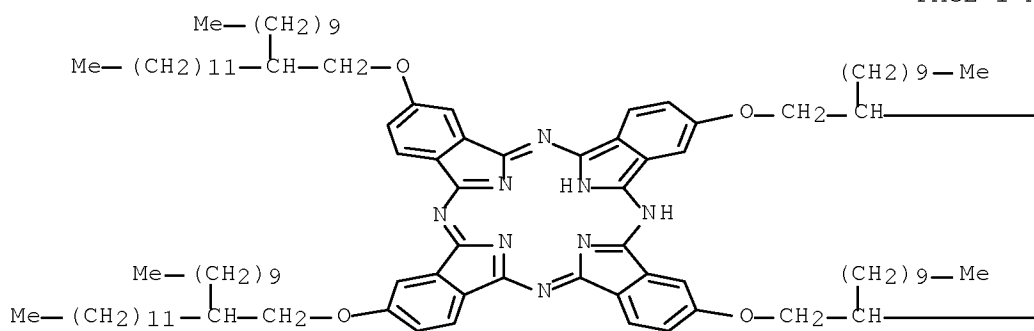
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RN 870088-22-5 HCAPLUS
 CN 29H,31H-Phthalocyanine, 2,9,16,23-tetrakis[(2-decyltetradecyl)oxy]- (CA
 INDEX NAME)



— (CH₂)₁₁—Me

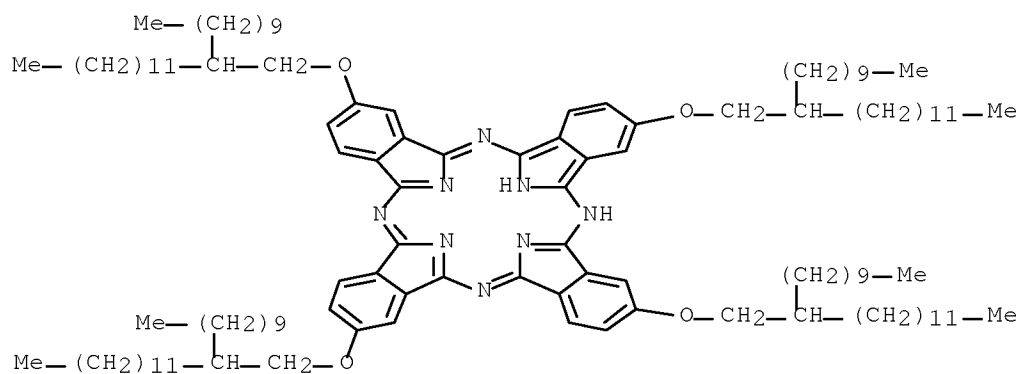
RN 870088-23-6 HCAPLUS
CN 29H,31H-Phthalocyanine, 2,9,16,24-tetrakis[(2-decyltetradecyl)oxy]- (CA
INDEX NAME)



— (CH₂)₁₁—Me

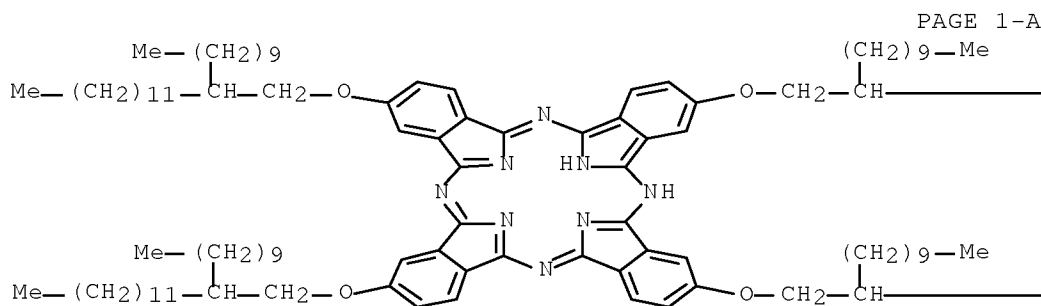
— (CH₂)₁₁—Me

RN 870088-24-7 HCAPLUS
CN 29H,31H-Phthalocyanine, 2,9,17,24-tetrakis[(2-decyltetradecyl)oxy]- (CA
INDEX NAME)



RN 870088-25-8 HCAPLUS

CN 29H,31H-Phthalocyanine, 2,10,16,24-tetrakis[(2-decyltetradecyl)oxy]- (CA INDEX NAME)



PAGE 1-B

— (CH₂)₁₁—Me

— (CH₂)₁₁—Me

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L24 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:1085985 HCAPLUS Full-text
 DOCUMENT NUMBER: 144:14471

TITLE: Liquid Crystalline Metal-Free Phthalocyanines Designed for Charge and Exciton Transport

AUTHOR(S): Tant, Julien; Geerts, Yves Henri; Lehmann, Matthias; De Cupere, Vinciane; Zucchi, Gaeel; Laursen, Bo Wegge; Bjornholm, Thomas; Lemaure, Vincent; Marcq, Valerie; Burquel, Anick; Hennebicq, Emmanuelle; Gardebien, Fabrice; Viville, Pascal; Beljonne, David; Lazzaroni, Roberto; Cornil, Jerome

CORPORATE SOURCE: Laboratoire de Chimie des Polymeres, Universite Libre de Bruxelles, Brussels, B-1050, Belg.

SOURCE: Journal of Physical Chemistry B (2005), 109(43), 20315-20323
CODEN: JPCBFK; ISSN: 1520-6106

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 11 Oct 2005

AB A joint theor. and exptl. study of the electronic and structural properties of liquid crystalline metal-free phthalocyanines bearing a strong potential for charge and exciton transport was performed. The synthesis of such compds. was triggered by quantum chemical calcns. showing that: (i) hole transport is favored in metal-free phthalocyanines by their extremely low reorganization energy (0.045 eV) and large electronic splittings; and (ii) the efficiency of energy transfer along the 1-dimensional discotic stacks is weakly affected by rotational disorder due to the two-dimensional character of the mols. The authors synthesized two metal-free phthalocyanines with different branched aliphatic chains on the gram scale to allow for a full characterization of their solid-state properties. The two compds. self-organize in liquid crystalline mesophases, as evidenced by optical microscopy, DSC, x-ray powder diffraction, and mol. dynamics simulations. They exhibit a columnar rectangular mesophase at room temperature and a columnar hexagonal mesophase at elevated temperature

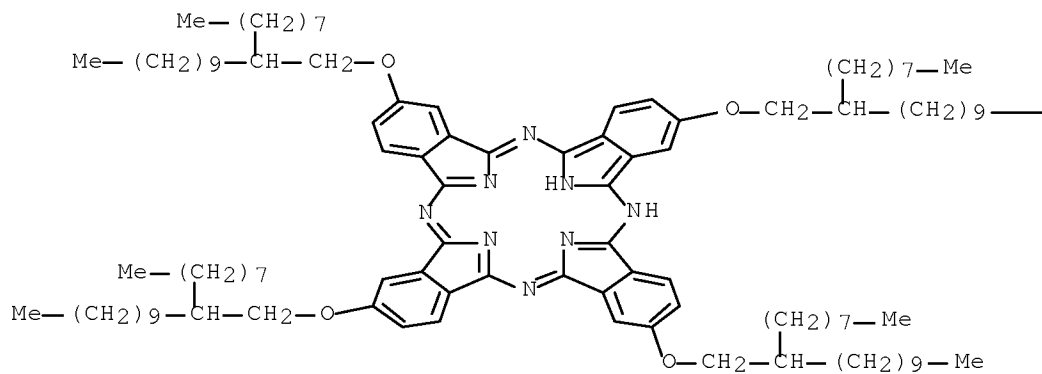
IT 870088-18-9P 870088-19-0P 870088-20-3P
870088-21-4P 870088-22-5P 870088-23-6P
870088-24-7P 870088-25-8P

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(preparation, liquid crystal properties and photophysics and mol. dynamics of isomeric mixture containing)

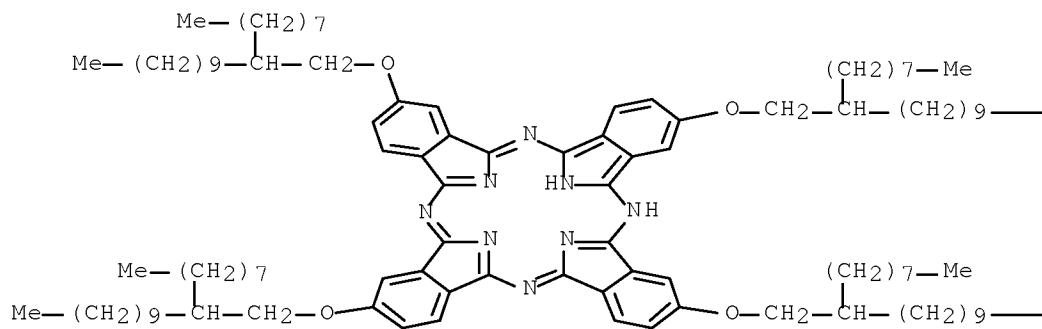
RN 870088-18-9 HCAPLUS

CN 29H,31H-Phthalocyanine, 2,9,16,23-tetrakis[(2-octyldodecyl)oxy]- (CA INDEX NAME)



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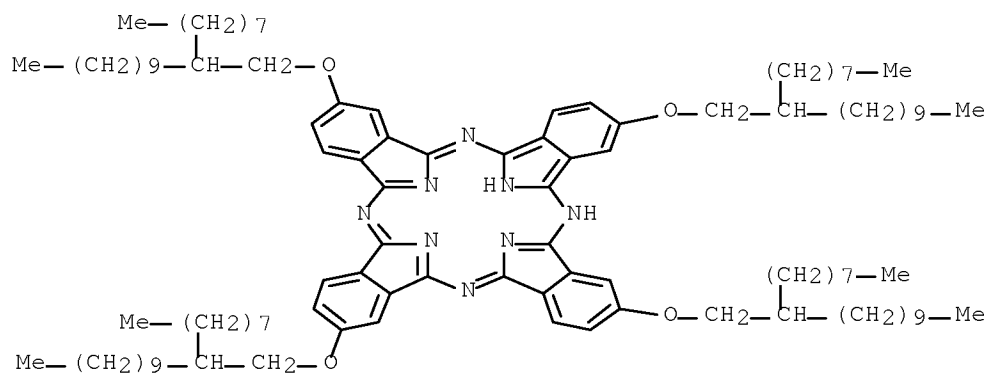
RN 870088-19-0 HCAPLUS
 CN 29H,31H-Phthalocyanine, 2,9,16,24-tetrakis[(2-octyldodecyl)oxy]- (CA
 INDEX NAME)



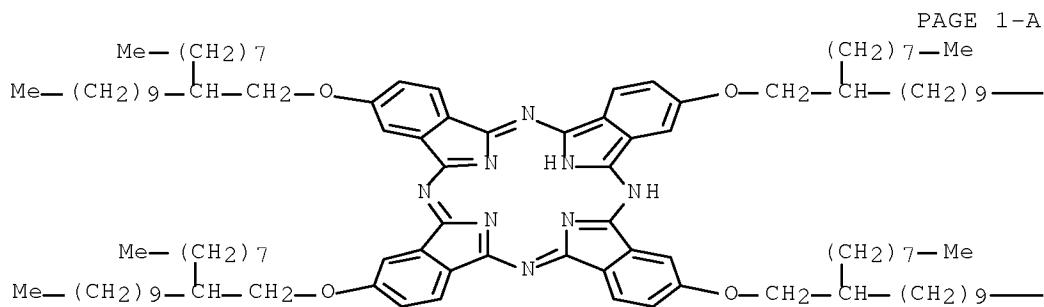
— Me

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RN 870088-20-3 HCAPLUS

CN 29H,31H-Phthalocyanine, 2,9,17,24-tetrakis[(2-octyldodecyl)oxy]- (CA
INDEX NAME)

RN 870088-21-4 HCAPLUS

CN 29H,31H-Phthalocyanine, 2,10,16,24-tetrakis[(2-octyldodecyl)oxy]- (CA
INDEX NAME)

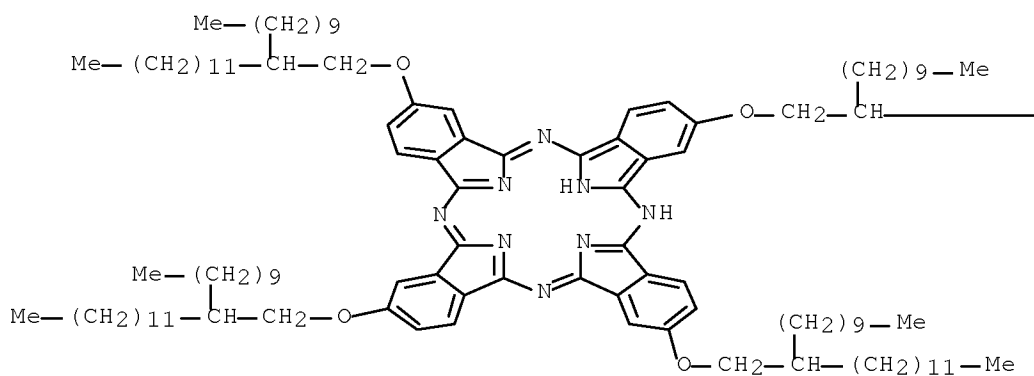
PAGE 1-A

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— Me

RN 870088-22-5 HCAPLUS
CN 29H,31H-Phthalocyanine, 2,9,16,23-tetrakis[(2-decyltetradecyl)oxy]- (CA INDEX NAME)

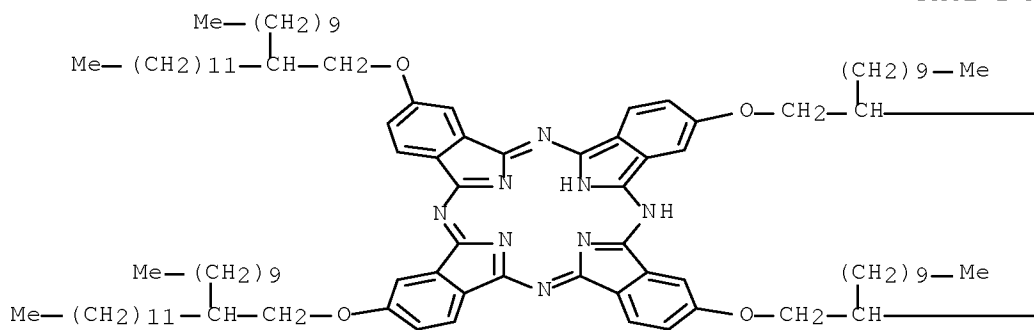
PAGE 1-A



PAGE 1-B

— (CH₂)₁₁—Me

RN 870088-23-6 HCAPLUS
CN 29H,31H-Phthalocyanine, 2,9,16,24-tetrakis[(2-decyltetradecyl)oxy]- (CA INDEX NAME)

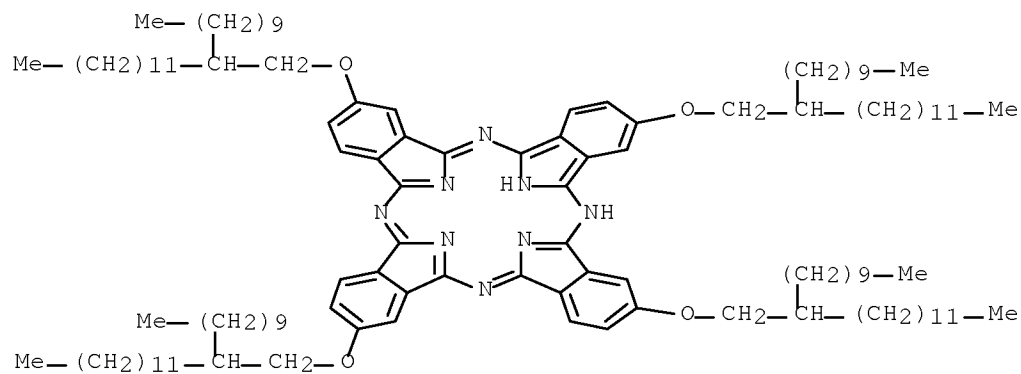


— (CH₂)₁₁—Me

— (CH₂)₁₁—Me

RN 870088-24-7 HCAPLUS

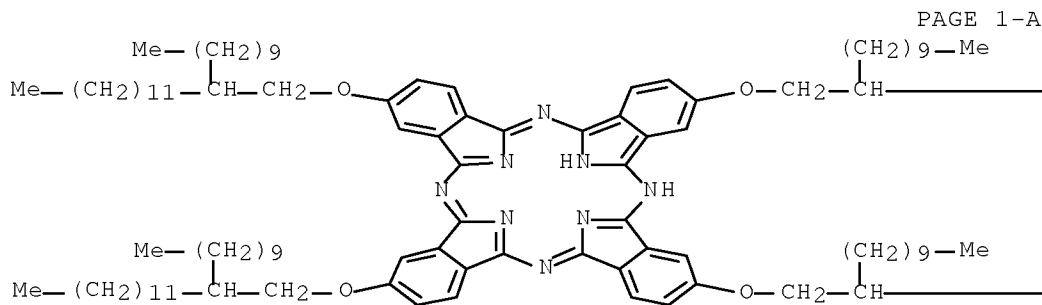
CN 29H,31H-Phthalocyanine, 2,9,17,24-tetrakis[(2-decyltetradecyl)oxy]- (CA INDEX NAME)



RN 870088-25-8 HCAPLUS

CN 29H,31H-Phthalocyanine, 2,10,16,24-tetrakis[(2-decyltetradecyl)oxy]- (CA

INDEX NAME)

— (CH₂)₁₁—Me— (CH₂)₁₁—Me

OS.CITING REF COUNT: 25 THERE ARE 25 CAPLUS RECORDS THAT CITE THIS RECORD (25 CITINGS)

REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:810842 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 143:220437

TITLE: Phthalocyanine derivative layer in electronic multilayer devices and method for the manufacturing thereof

INVENTOR(S): De Cupere, Vinciane; Tant, Julien; Geerts, Yves

PATENT ASSIGNEE(S): Universite Libre de Bruxelles, Belg.

SOURCE: Eur. Pat. Appl., 9 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1564826	A1	20050817	EP 2004-447032	20040210
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

Serial No.:10/588,865

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 CA 2555309 A1 20050818 CA 2005-2555309 20050118
 WO 2005076383 A2 20050818 WO 2005-EP556 20050118
 WO 2005076383 A3 20051124
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
 NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
 TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, SM
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
 MR, NE, SN, TD, TG
 EP 1714331 A2 20061025 EP 2005-701089 20050118
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS
 US 20070225491 A1 20070927 US 2007-588865 20070608
 PRIORITY APPLN. INFO.: EP 2004-447032 A 20040210
 WO 2005-EP556 W 20050118

OTHER SOURCE(S): MARPAT 143:220437

ED Entered STN: 18 Aug 2005

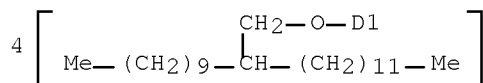
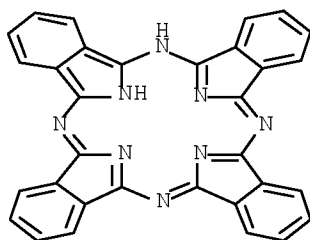
AB The present invention relates to an electronic device including at least one organic semi-conducting layer comprising a homeotropically organized phthalocyanine derivative sandwiched between at least two substrate layers. The electronic device can be used in photovoltaic cells, organic light emitting diodes and sensors.

IT 803724~14~3D, derivs.

RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses)
 (phthalocyanine derivative layer in electronic multilayer devices and method for the manufacturing thereof)

RN 803724-14-3 HCAPLUS

CN 29H,31H-Phthalocyanine, C,C,C,2-tetrakis[(2-decyltetradecyl)oxy]- (CA INDEX NAME)

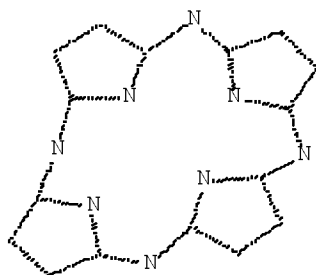


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

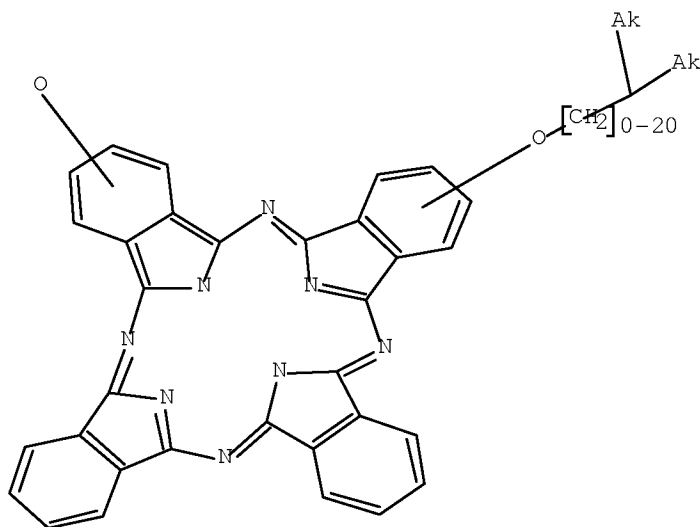
Serial No.:10/588,865

Structure Search

=> D STAT QUE L18
L1 STR



Structure attributes must be viewed using STN Express query preparation.
L5 45087 SEA FILE=REGISTRY SSS FUL L1
L10 STR



Structure attributes must be viewed using STN Express query preparation.
L12 15 SEA FILE=REGISTRY SUB=L5 SSS FUL L10
L18 6 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L12

=> S L18 NOT L24
L39 1 L18 NOT L24

=> D IBIB ED ABS HITSTR 1

Serial No.:10/588,865

L39 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2006:1066869 HCAPLUS Full-text
 DOCUMENT NUMBER: 145:440958
 TITLE: Lubricant composition
 INVENTOR(S): Kawata, Ken
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 98pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006106856	A1	20061012	WO 2006-JP306718	20060330
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2006307201	A	20061109	JP 2006-93620	20060330
JP 2006307202	A	20061109	JP 2006-93621	20060330
EP 1876220	A1	20080109	EP 2006-730666	20060330
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
US 20090143262	A1	20090604	US 2007-887451	20070928
KR 2007116672	A	20071210	KR 2007-724989	20071029
PRIORITY APPLN. INFO.:			JP 2005-98917	A 20050330
			WO 2006-JP306718	W 20060330

OTHER SOURCE(S): MARPAT 145:440958

ED Entered STN: 13 Oct 2006

AB Disclosed is a lubricant composition containing a polymer which has a mesogen structure in a main chain or a side chain. The polymer added as the viscosity index-improving agent also improves shear stability and lubricating characteristics of the lubricant oil.

IT 912821-61-5 912822-21-0 912823-09-7

RL: MOA (Modifier or additive use); USES (Uses)

(viscosity index improving polymer additive for lubricant oils)

RN 912821-61-5 HCAPLUS

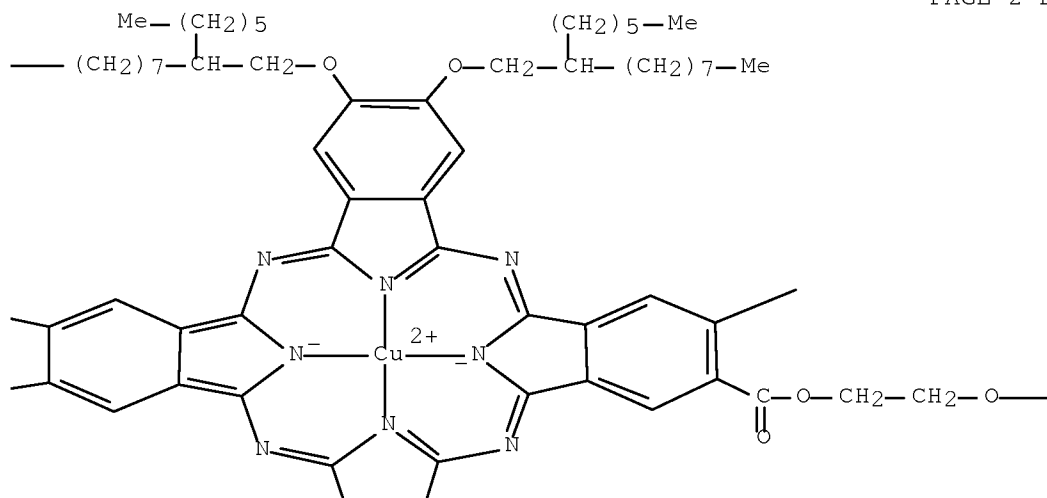
CN Poly[[9,10,16,17,23,24-hexakis[(2-hexyldecyl)oxy]-29H,31H-phthalocyanine-2,3-diyl-κN29,κN30,κN31,κN32](1,12-dioxo-2,5,8,11-tetraoxadodecane-1,12-diyl) (SP-4-2)-copper complex] (9CI) (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

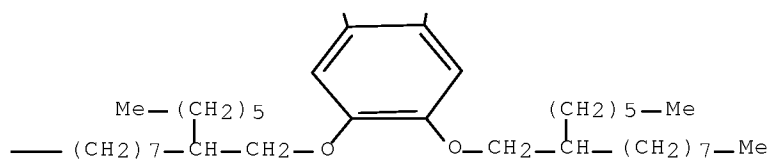
PAGE 2-B



* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

PAGE 3-B



* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

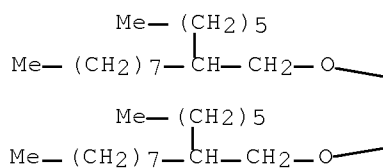
RN 912822-21-0 HCAPLUS

CN Copper, [2-[2-[2-[3,9,10,16,17,23,24-heptakis[(2-hexyldecyl)oxy]-29H,31H-

phthalocyanin-2-yl-κN29,κN30,κN31,κN32]oxy]ethoxy]
ethoxy]ethyl 2-methyl-2-propenoato(2-)]-, (SP-4-2)-, homopolymer (9CI)
(CA INDEX NAME)

CRN 912822-20-9
CMF C154 H256 Cu N8 O12
CCI CCS

Me—

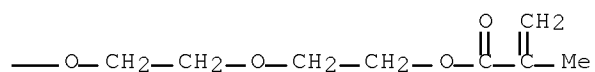


Chemical structure of the copper complex (1) is shown below. The central copper atom (Cu²⁺) is coordinated by four nitrogen atoms in a square planar geometry. The ligands are:

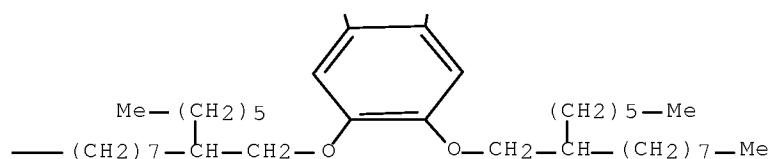
- Top: A phthalocyanine derivative with two long alkyl chains: $\text{Me}-(\text{CH}_2)_5-\text{CH}(\text{CH}_2)_7-\text{O}-$ and $-(\text{CH}_2)_7-\text{CH}(\text{CH}_2)_5-\text{Me}$.
- Bottom: A phthalocyanine derivative with two long alkyl chains: $-(\text{CH}_2)_5-\text{Me}$ and $-(\text{CH}_2)_7-\text{Me}$.

The structure is a macrocyclic complex with a central copper atom coordinated by four nitrogen atoms. The ligands are substituted with long alkyl chains, making the complex highly hydrophobic and suitable for membrane applications.

— (CH₂)₇—Me



Me—



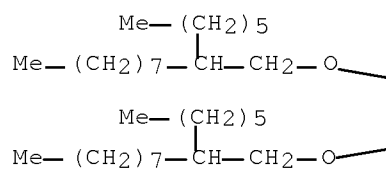
RN 912823-09-7 HCAPLUS
 CN Copper, [9,10,16,17,23,24-hexakis[(2-hexyldecyl)oxy]-29H,31H-phthalocyanine-2,3-dicarboxylato(4-)-κN29,κN30,κN31,κN32]-, dihydrogen, (SP-4-2)-, polymer with 2,2'-[1,2-ethanediylbis(oxy)]bis[ethanol] (9CI) (CA INDEX NAME)

CM 1

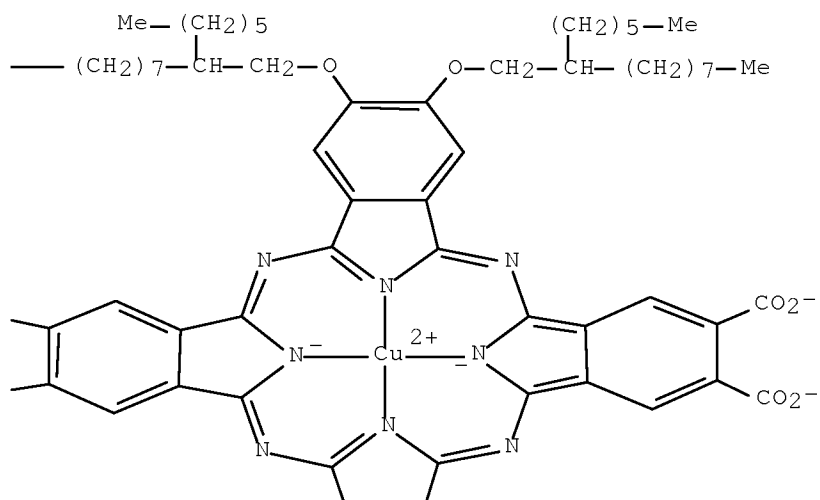
CRN 912823-08-6
 CMF C130 H206 Cu N8 O10 . 2 H
 CCI CCS

PAGE 1-A

Me—



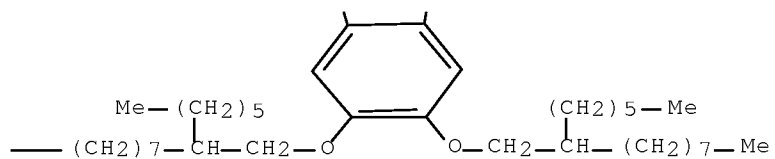
PAGE 1-B



PAGE 2-A

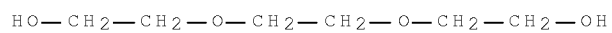
Me—

● 2 H⁺



CM 2

CRN 112-27-6
CMF C6 H14 O4

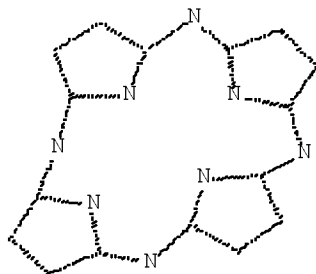


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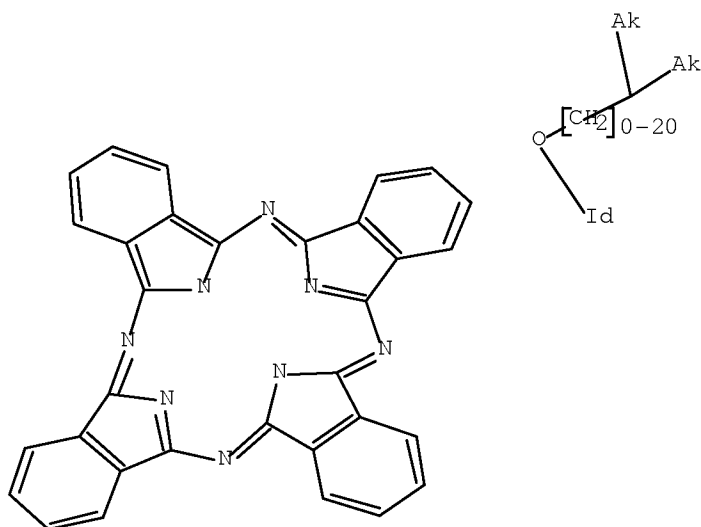
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THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> D STAT QUE L19
L1 STR



Structure attributes must be viewed using STN Express query preparation.
L5 45087 SEA FILE=REGISTRY SSS FUL L1
L14 STR



Structure attributes must be viewed using STN Express query preparation.
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L19 9 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L16

=> S L19 NOT L18,L24
L40 2 L19 NOT (L18 OR L24)

=> D IBIB ED ABS HITSTR 1-2

L40 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:1350942 HCAPLUS [Full-text](#)
DOCUMENT NUMBER: 150:110464
TITLE: Comparative structural study of thin films of a

Serial No.:10/588,865

columnar liquid crystal aligned by mechanical shearing and zone casting

AUTHOR(S): Anokhin, Denis V.; Rosenthal, Martin; Makowski, Tomasz; Tracz, Adam; Bras, Wim; Kvashnina, Kristina; Ivanov, Dimitri A.

CORPORATE SOURCE: CNRS UPR 9069, Institut de Chimie des Surfaces et Interfaces, Mulhouse, F-68057, Fr.

SOURCE: Thin Solid Films (2008), 517(2), 982-985
CODEN: THSFAP; ISSN: 0040-6090

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

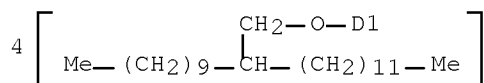
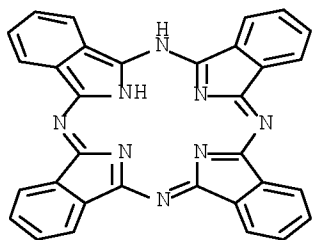
ED Entered STN: 11 Nov 2008

AB Zone casting is a promising method for fabrication of open highly oriented crystalline and liquid crystalline (LC) films for various applications in (opto)electronics. The authors have performed a comparative structural anal. of mech. sheared and zone-cast films of a model columnar LC. Grazing incidence x-ray diffraction and UV-vis spectroscopy show that, contrary to the mech. sheared films, the columns in the zone-cast films are aligned perpendicular to the casting direction. In the films, two LC domains with [20] or [11] reciprocal space vectors perpendicular to the substrate plane are observed. This can be explained by a small lattice mismatch allowing epitaxial growth of the LC domains on each other.

IT 803724-14-3
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(comparative structural study of thin films of columnar liquid crystal aligned by mech. shearing and zone casting)

RN 803724-14-3 HCAPLUS

CN 29H,31H-Phthalocyanine, C,C,C,2-tetrakis[(2-decyltetradecyl)oxy]- (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:1054303 HCAPLUS Full-text

DOCUMENT NUMBER: 142:45544

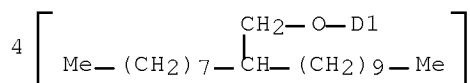
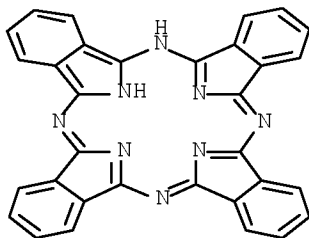
TITLE: A composition for photon-energy up-conversion

INVENTOR(S): Miteva, Tzenka; Nelles, Gabriele; Yasuda, Akio; Balouchev, Stanislav; Keivanidis, Panagiotis; Lupton,

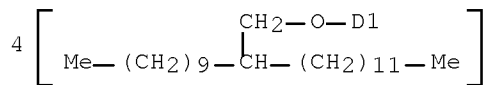
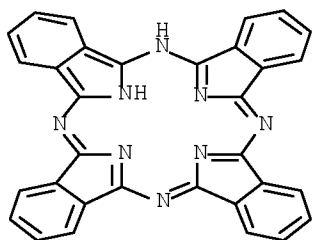
PATENT ASSIGNEE(S): John
 Sony International Europe G.m.b.H., Germany;
 Max-Planck-Gesellschaft zur Foerderung der
 Wissenschaften e.V.
 SOURCE: Eur. Pat. Appl., 30 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1484379	A1	20041208	EP 2003-12536	20030602
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 20050056815	A1	20050317	US 2004-856628	20040528
AU 2004202413	A1	20041216	AU 2004-202413	20040531
AU 2004202413	B2	20090730		
KR 2004103500	A	20041208	KR 2004-39539	20040601
JP 2005049824	A	20050224	JP 2004-164783	20040602
PRIORITY APPLN. INFO.:			EP 2003-12536	A 20030602

ED Entered STN: 09 Dec 2004
 AB A composition for photon energy up-conversion is described comprising at least two components, wherein a first component is capable of absorbing energy at a first wavelength region λ_1 , which first component acts as a sensitizer in the composition, and wherein a second component is capable of emitting energy at a second wavelength region λ_2 , which second component acts as an emissive component in the composition, wherein $\lambda_2 \leq \lambda_1$, and wherein, upon absorption of energy by the first component at the first wavelength region λ_1 , the emissive component emits energy at the second wavelength region λ_2 , characterized in that the first component and/or the second component is an organic compound A photon-energy upconversion system comprising a substrate and the described composition is also described.
 IT 803724-13-2 803724-14-3
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
 (sensitizer; composition for photon-energy up-conversion and devices of using the same)
 RN 803724-13-2 HCAPLUS
 CN 29H,31H-Phthalocyanine, C,C,C,2-tetrakis[(2-octyldodecyl)oxy]- (9CI) (CA INDEX NAME)



RN 803724-14-3 HCAPLUS
 CN 29H,31H-Phthalocyanine, C,C,C,2-tetrakis[(2-decyltetradecyl)oxy]- (CA
 INDEX NAME)



OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS
 RECORD (10 CITINGS)
 REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Search History

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L1          STRUCTURE UPLOADED
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FILE 'REGISTRY' ENTERED AT 14:41:59 ON 16 SEP 2009
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          803724-14-3/BI)
L5          45087 SEA SSS FUL L1
L6          50 SEA SPE=ON  ABB=ON  PLU=ON  L5 AND L2
L7          1 SEA SPE=ON  ABB=ON  PLU=ON  L5 AND L4
L8          STRUCTURE UPLOADED
L9          50 SEA SUB=L5 SSS SAM L8
L10         STRUCTURE UPLOADED
L11         0 SEA SUB=L5 SSS SAM L10
L12         15 SEA SUB=L5 SSS FUL L10
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L16         5 SEA SUB=L5 SSS FUL L14
L17         1 SEA SPE=ON  ABB=ON  PLU=ON  L16 AND L4

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L21         14 SEA SPE=ON  ABB=ON  PLU=ON  TANT J?/AU
L22         94 SEA SPE=ON  ABB=ON  PLU=ON  GEERTS Y?/AU
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          (L18 OR L19)

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L37         STRUCTURE UPLOADED

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Serial No.:10/588,865

L38 183 SEA SUB=L33 SSS FUL L37

FILE 'HCAPLUS' ENTERED AT 15:57:44 ON 16 SEP 2009

L39 1 SEA SPE=ON ABB=ON PLU=ON L18 NOT L24

L40 2 SEA SPE=ON ABB=ON PLU=ON L19 NOT (L18 OR L24)